

ABSTRACT OF THE DISCLOSURE

A reflector assembly includes at least one reflector body having an inner cavity including a first inner surface conformable along a first geometric curve, and a second inner surface conformable along a second geometric curve. An outer surface is conformable about the first geometric curve. A plurality of through apertures are spaced about the reflector body, each formed between the outer surface and a transition region between the first inner surface and the second inner surface. A coolant flow source directs a coolant toward the reflector body. A first portion of the coolant contacts the outer surface, and a second portion of the coolant enters the inner cavity through the apertures. Providing apertures at or adjacent to the change in reflector body wall thickness allows a positive flow of cooling medium around and into the reflector body, while positioning an arc lamp outside of a cooling medium direct impingement path.